

Mathematics Worksheet

Name: _____.

Date: _____.

Grade: 7th

Each section includes 5 questions based on your study guide topics. Read each question carefully and answer.

1-1 Relate Integers and Their Opposites

1. What is the opposite of -9 ?

Ans:

2. On a number line, what is the distance between -4 and 4 ?

Ans:

3. Write two integers that are opposites of each other.

Ans:

4. If the temperature drops from 5°C to -3°C , what is the change in temperature?

Ans:

5. Explain how absolute value helps you find the distance between two numbers on a number line.

Ans:



1-2 Understand Rational Numbers

1. Write $\frac{3}{4}$ as a decimal.

Ans:

2. Is -2.6 a rational number? Explain why or why not.

Ans:

3. Convert $\frac{7}{12}$ to a decimal. Is it terminating or repeating?

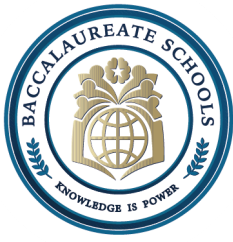
Ans:

4. Write a fraction that represents the repeating decimal $0.333\dots$

Ans:

5. Give one example of an irrational number, and explain why it isn't.

Ans:



1-3 Add Integers

1. Find the sum: $-5 + 8$.

Ans:

2. Find the sum: $-9 + (-6)$.

Ans:

3. A submarine is 300 meters below sea level. It rises 175 meters. What is its new position?
[Hint: below sea level, distance will be negative. Eg: 500 meters below sea level is -500 meters.]

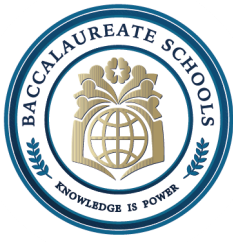
Ans:

4. Use a number line to model $4 + (-7)$.

Ans:

5. Explain how adding integers is similar to moving right or left on a number line.

Ans:



1-4 Subtract Integers

1. Find the result of $6 - (-4)$.

Ans:

2. Find the result of $-3 - 5$.

Ans:

3. Explain why subtracting a negative number is the same as adding its opposite.

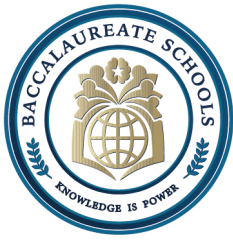
Ans:

4. A hiker climbs from -20 m to $+10$ m. What is the total change in elevation?

Ans:

5. Find the result of $-8 - (-3)$

Ans:



1-5 Add and Subtract Rational Numbers

1. Find $\frac{3}{4} + (-\frac{1}{2})$. Write your answer in simplest form.

Ans:

2. Find the result of $-2.5 + 1.75$.

Ans:

3. Subtract: $-\frac{3}{8} - \frac{5}{8}$

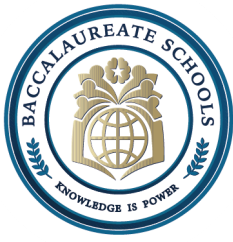
Ans:

4. On a number line, show what happens when you add $-0.6 + 1.2$.

Ans:

5. A scuba diver descends 7.5 meters and then rises 3.2 meters. What is the diver's final depth?

Ans:



1-6 Multiply Integers

1. Multiply -4×6 .

Ans:

2. Multiply $-7 \times (-3)$.

Ans:

3. Explain the sign rule when multiplying positive and negative integers.

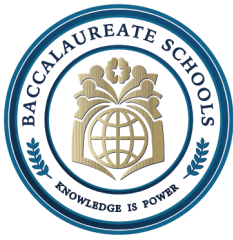
Ans:

4. If a plane descends 250 meters per minute for 4 minutes, how far does it descend?

Ans:

5. Find the result of: $(-8) \times 5 \times (-2)$.

Ans:



1-7 Multiply Rational Numbers

1. Multiply $\frac{3}{4} \times -\frac{2}{3}$

Ans:

2. Find the result of -1.5×0.4 .

Ans:

3. A company's profit is $-\$2.50$ per item. If it sells 12 items, what is the total profit or loss?

Ans:

4. Multiply $-\frac{5}{6} \times -\frac{3}{2}$ and simplify your answer.

Ans:

5. Explain how the product of two negative rational numbers can be positive.

Ans: